ORSYP

Finding a Smart Alternative for Enterprise Scheduling

White Paper

Contents

Executive Overview

In many organizations IT departments are approaching a crossroads at which they need to make decisions regarding their future scheduling and automation strategy. They find themselves surrounded by multiple tools – each one managing part of their daily batch workload – and reliant on manual scripting and run books to perform IT processes critical to business operations.

Continued use of these incumbent tools is uncertain. As vendors end support for legacy or acquired products, customers are being pushed towards upgrades that will cost hundreds of thousands to license. Needing to migrate from one product to another means even more cost – consulting, professional services, retraining - and a conversion project that will take many months to complete.

Having multiple schedulers means multiple maintenance bills. It also means Operations staff needing to be skilled using each tool. Errors and delays can occur when handing off IT workload between schedulers impacting performance and IT service delivery. Consolidating to an enterprise-wide automation solution, organizations can:

- Reduce capital expenditure by up to 50% and operational costs by around 30%
- Accelerate throughput creating extra time, every day, to do get more work done
- Assure on-time delivery of up-to-date reports to management every day
- Increase productivity with fewer incidents and staff spending less time fixing problems
- Gain end-to-end visibility and control of their IT processes
- Comply with IT audits and avoid crippling penalty payments

Conversion utilities combined with proven upgrade methodologies remove any potential risk when switching from legacy tools. Companies can leverage existing job definitions, process flows and work plans when upgrading to a scalable, agile automation solution that will support current and future scheduling demands.

ORSYP is an IT Operations Management solutions provider that specializes in helping customers replace their legacy tools with a unified enterprise scheduling platform. This white paper identifies many of the challenges and opportunities organizations face managing the automation of their IT operations – a contradiction in itself. It also elaborates on how ORSYP has partnered with over 1400 clients – many of who replaced legacy tools - in establishing an enterprise wide automation platform that is integral to driving their business operations.

Introduction

Today many data centers are paying for multiple scheduling tools to automate their IT Operations. A portfolio of schedulers has developed in each organization as new applications and IT systems have been implemented to support business operations. Extra automation technology introduced as a result of company merger and acquisition or outsourcing further complicates the picture.

Islands of automation are emerging. Setting up jobs using an operating systems scheduler is very different to setting up ERP background processing. Time fencing jobs scheduled to run in disparate systems is a common cause for IT departments failing to meet service level objectives.

Meantime, automation vendors have been rationalising their job scheduler offerings, signalling end-of-life for tools that have been acquired or become technologically outdated.

Year	Recent merger activity for automation software vendors
2006	CA purchases Cybermation
2007	AppWorx bought by UC4
2007	Realops purchased by BMC
2007	HP acquires Opsware
2008	BMC buys Bladelogic
2009	Tidal Software purchased by Cisco
2009	Terracotta buys open source automation tool Quartz
2009	Microsoft acquires Opalis
2011	Stonebranch merges with Opswise
2011	Platform Computing bought by IBM
2011	Quartz added to Software AG with purchase of Terracotta

Their customers are expected to pick up the bill. Vendors offer complex, expensive migration paths to replacement tools with no guarantee that existing functionality will be fully available at the end of the journey.

Costs mount up fast as the replacement scheduler comes at a new, significantly higher price. Supplementary needs, such as an extra database, not only adds to license cost; it also means extra DBA skills have to be paid for. And then there is the not so slight matter funding and executing the migration project.

Coming at a time when there are immense economic pressures, IT departments need to revisit automation. Strategies that will help achieve operational cost savings today and provide new agility tomorrow to automate processing in virtualized and cloud environments must be determined.

While the recommended option from vendors will be migration to their new platform, their customers remain unconvinced, challenging the service they receive both in terms of commercial relationship, product as well as value to the business.

IT Operations Challenges & Opportunities

Regardless of which job scheduling and workload automation products they are using today, most organizations face the following IT Operations challenges:

➜ Reducing IT capital and operational expenditure

- ☐ Rationalize the number of scheduling tools can mean one annual licence fee and daily savings of 30% in staff time

- ☐ Reduce the scheduler footprint to eliminate 33% of network communications and realize hardware savings

- ☐ Increase staff productivity ensuring hours aren't wasted each day switching between systems checking jobs or fire-fighting problems

- ☐ Manage ownership costs with lower admin and maintenance overheads

➜ Enhancing IT service delivery

- ☐ Reduce incidents and problem resolution times by up to 90%

- ☐ Gain extra IT agility to improve ROI on existing IT assets and leverage cloud

- ☐ Integrate enterprise applications to achieve business/IT alignment

- ☐ Accelerate throughput of IT workload can reduce the batch window by 30%

- ☐ Increase availability and make sure end-users benefit from working with up-to-date accurate management information

➜ Enabling innovation and supporting business growth

- ☐ Dynamic provisioning in the cloud to optimize

- ☐ Improve delivery of new services to enable the business to gain competitive advantage

- ☐ Comply with IT Audit across the enterprise and avoid crippling fines

- ☐ Extend the scope of automation to do more at no extra cost

- ☐ Grow without feeling the pain of punitive software license fees

Major efficiencies can be achieved in each of these areas through the adoption of new automation strategies.

Reducing IT Costs

Rationalize the number of scheduling tools

Many organizations use more than one job scheduling product – each one accounts for a separate annual licence payment. Each tool is different meaning staff need to be trained and have experience of working with multiple tools when configuring, managing and monitoring IT workload, adding around 50% to operational costs. Switching to a single enterprise automation solution means one manageable annual maintenance fee and daily savings in staff time.

Reduce the scheduler footprint
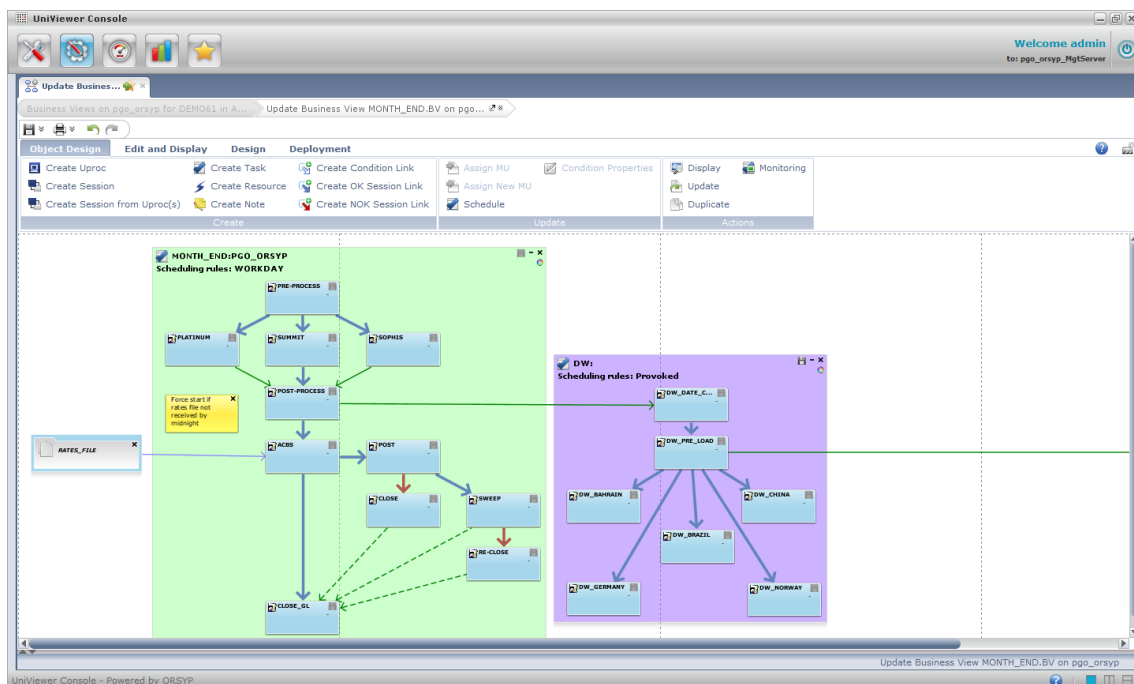
Often the work that needs automating on the majority of servers within an enterprise are simple tasks that don't require the heavy-duty functionality of a commercial scheduler. 33% of network communications can be eliminated and 50% hardware savings can be achieved with an automation platform that can offers lightweight and full function options. Adopting a two-tier approach when

automating server workload across an enterprise can provide the best of both worlds – 100% coverage at minimal costs.

Increase staff productivity

Relying on multiple management tools to schedule and monitor IT workload is inefficient and time-consuming. Instead of cloning existing definitions to create new jobs, creating re-usable objects improves productivity and simplifies maintenance. Centralizing to one interface that gives enterprise wide visibility means staff doesn't waste hours each day switching between systems checking jobs or fire-fighting problems.

Increase staff productivity with a centralized view of IT processes

Manage ownership costs

Legacy schedulers can mean specialized, dedicated DBA resource needed to perform configuration and admin tasks. Cumbersome procedures when moving workload from development to production or applying patches to each server add to maintenance costs. Setting up job plans can be complex, requiring external consultant skills which don't come free-of-charge. Operational costs can be significantly lower when using an innovative enterprise automation that is self-maintaining and intuitive to use.

Enhancing IT Service Delivery

Reduce incidents and problem resolution times

Too often, the first time IT Operations hear about a problem is when a user calls. In-house schedulers and legacy tools either provide no alerting or require additional products to manage problems. Switching to a solution that proactively monitors workload will not only ensure IT is first to know when issues arise; it will also reduce incidents by taking remedial actions as soon as known problems occur. Up to a 90% reduction in support calls means increased staff productivity while fewer errors ensure a greatly improved end-user service.
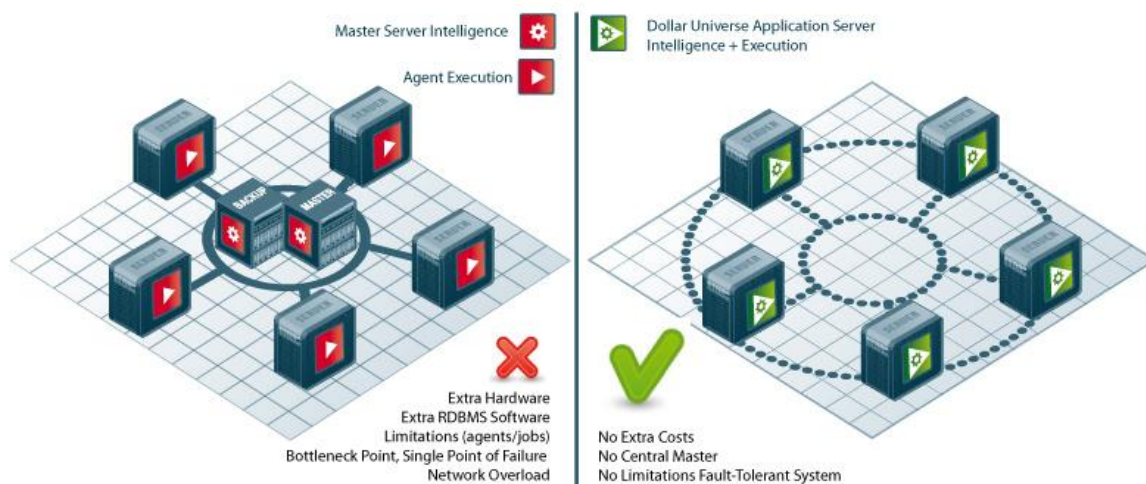
Gain extra IT agility

Confined to managing job submissions, most tools are unable to route workload away from busy servers or take advantage of spare capacity. Automation policies with physical resource definitions hard-wired will not be able to offer the agility required to manage workload running virtualized or in the cloud. Real-time monitoring and orchestration of IT workload in a hybrid environment are critical when optimizing use of available computing resources without impacting service levels.

Integrate enterprise applications

With significant batch workload running inside enterprise applications, such as SAP CCMS and Oracle EBS Concurrent Manager, incumbent schedulers struggle to provide the integration or visibility for end-to-end management and control of critical IT processes. Upgrading to an automation tool that connects with strategic applications and offers in-depth insight into IT workload across the enterprise enables alignment between business and IT.

Accelerate throughput of IT workload

Clocks and calendars used by legacy schedulers are increasing irrelevant in a world where business is open all hours in all time-zones. Ensuring IT workload is event-driven allows jobs to run at exactly the right time which can result in a 30% reduction of an organization's batch window each night. End users get the reports they need to do their jobs on-time with up-to-date accurate information with IT automation that can be driven by business events.

Increase availability by eliminating single point of failure

Increase availability

Some scheduling tools need a little downtime each day to load up the new day calendar – not ideal when IT is increasingly 24x7 operations. Schedulers based on a master-agent model come with an inherent single point of failure when the connection between agent and master is lost. A small problem, such as a router error, can have a devastating impact. Upgrading to an enterprise automation solution that offers unique peer-to-peer communications ensures outages minimized and availability maximized.

Enabling Innovation & Growth

Dynamic provisioning in the cloud

As a consumer and regulator of cloud resources, automation has a vital role to play provisioning and managing capacity to execute IT workload. Being able to communicate with providers using Web Services, REST and other open APIs is mandatory to ensure IT gets best value-for-money and meets its SLAs. Organizations need technology that can combine real-time performance data with predictive forecasting in deciding how and where to route IT processing.

Improve delivery of new services

As DevOps teams strive to break down the barriers between application development and IT operations teams, they need rapid deployment capabilities for new customizations and updates destined for end-users. Instead of relying on manual scripts, automating application roll-outs with a solution that is scalable, predictable and resilient enables the business to gain competitive advantage from using latest IT innovations when serving customers.

Comply with IT Audit across the enterprise

IT departments can expect to submit themselves for regular audit. Material failure is not an option when Sarbanes-Oxley (SOX) compliance is a mandatory company requirement. Detailed tracking and reporting of IT workload and providing documentation of business processes are critical to meeting audit criteria. Upgrading to an enterprise automation platform that can record and report on all activity means IT passes audits and business avoids crippling fines.

Extend the scope of automation

While traditional schedulers have been used to sequence batch jobs and manage dependencies, new scenarios are emerging where automation can bring value. Automating the extracting of ERP transaction data for business intelligence reporting or scheduling database archiving, either of which could improve end-user response times, are just two examples. Additional value can be realized from an automation solution that incorporates and enacts policy definitions that come with the explosion in new IT systems and applications.

Grow without feeling the pain

Adding extra servers in many organizations means extra software license fees. Increasingly, vendors are unwilling to negotiate and push clients into purchasing bundles of server licenses at significant expense – for software there is no immediate plan to use. Vendors can even impose a new Enterprise License Agreement – resulting in major capital expenditure and long-term vendor lock-in. Organizations need to engage with an automation partner that can accommodate incremental growth by delivering on the promise of granular pricing.

Consolidating to an Enterprise Automation Solution

Without too much effort significant cost savings and operational efficiencies can be realized by revisiting automation. However while multiple options are available, choices have to be made in deciding which path to follow and how far to go. These can become limited as legacy tools approach end-of-life or a vendor indicates it will end support for a product or an operating system.

In fact, choosing the right path and going all the way is now possible. ORSYP offers an enterprise wide automation solution that organizations can upgrade to from their legacy products and in-house tools. The software offers powerful, rich features that tick all the boxes.

ORSYP: The Smart Alternative for Enterprise Scheduling		
Reduce IT Costs	**Enhance IT Service Delivery**	**Enable Innovation & Growth**
✓ Rationalize the number of scheduling tools ✓ Reduce the scheduler footprint ✓ Increase staff productivity ✓ Manage ownership costs	✓ Reduce incidents and problem resolution times ✓ Gain extra IT agility ✓ Integrate enterprise applications ✓ Accelerate throughput of IT workload ✓ Increase availability	✓ Dynamic provisioning in the cloud ✓ Improve service delivery ✓ Comply with IT Audit across the enterprise ✓ Extend scope of automation ✓ Grow without feeling the pain

It also has proven methodologies and a migration toolset that reduces conversion efforts. Leveraging knowledge, experience and expertise gained from numerous successful projects replacing third party and in-house tools ensures that migrating to ORSYP is a no-risk option.

Scheduler Upgrade Project

ORSYP has a proven track record helping many organizations upgrade off their plethora of legacy third party and in-house automation tools. In these situations it is essential that all aspects of any conversion are covered. To make business sense the project has to overcome all major obstacles by establishing an enterprise automation platform that improves on services delivered today and can enable future innovation and growth.

1. Environmental Analysis

Key individuals responsible for automation architecture, infrastructure, applications and deployment will benefit from initial training. This will provide the knowledge to support the many decisions that will need to be taken in project planning, such as defining project scope, whether to have a phased approach. The following outlines an example of the multiple steps of an upgrade.

2. Automation Strategy & Architecture

Prior to product deployment, there needs to be agreement on architectural design for the automation landscape. Consideration needs to be given to how best practice as well as norms and standards can be applied through the implementation. Topics that need covering include:

- Security requirements
- Naming conventions
- Staging environments for lifecycle management
- Integration with applications and infrastructure tools
- Problem escalation procedures
- Automated recovery plans
- Disaster recovery and business continuity

At this stage it is also imperative to identify any issues that might cause delay or where extra resource may be required. Working through each of these topics, and anticipating any factors that might add project risk, a detailed plan is built upon which the rest of the implementation will be based.

3. Software Deployment

Automated installers ensure product deployment is swift – not only advantageous when first implementing the software but also crucial when workload needs immediate deployment across thousands of servers in a production scenario.
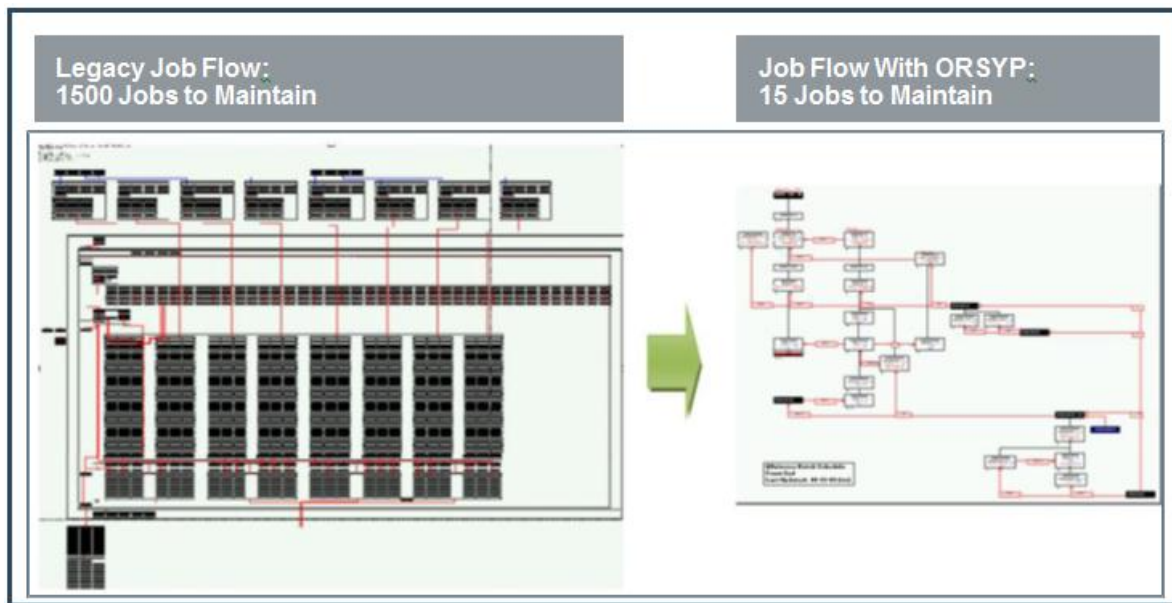
4. Applications & Infrastructure Integration

Workload executing within key business applications needs to be identified along with system administration and monitoring tools used to manage IT infrastructure. For leading enterprise applications out-of-the-box connectors are available. Centralizing configuration and control of all application workload accelerates implementation and enhance end-to-end visibility of IT processes. Adapters that integrate with IT supervision tools, such as HP Operations Manager, enable drill-down investigation and analysis when resolving problems.

Custom code, scripts and in-house developed tools used to control IT processing will require analysis. In many cases the purpose they serve may become redundant with the upgrade or can be accomplished by a feature of the ORSYP solution. Obviously, this exercise can determine any functionality that does need to be transferred onto the new automation platform.

5. Migration of Job Definitions

In most organizations, the job definitions, job plans, process flows, dependency mappings contained within a scheduler map critical business processes. Hence they can represent a significant corporate asset. Tools are used to extract these resource definitions from legacy job scheduling systems to be converted and imported as ORSYP equivalent definitions.
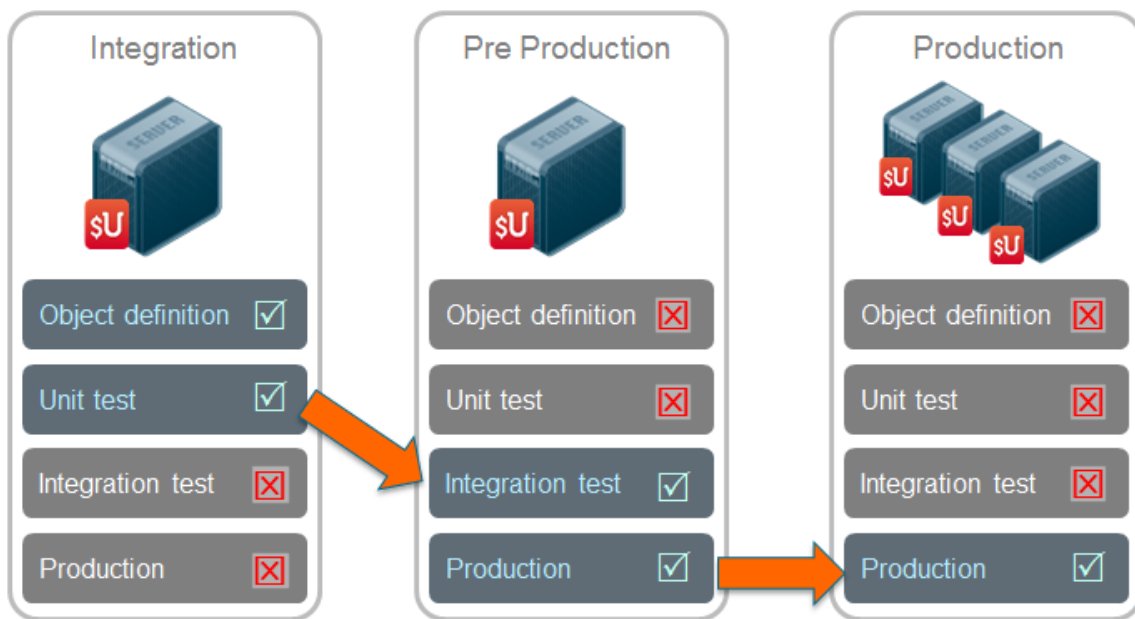
Complex job flow definitions can be simplified after migration

While this exercise can provide a 1:1 image of the current scheduling rules, it can also be used to refine schedules. For instance, multiple jobs performing basically the same function are rationalized down to a single re-usable object – reducing future maintenance and admin overheads.

6. Testing & Verification

This critical stage in the process will typically be broken down into manageable repeatable units. A pilot application maybe identified as an initial target and once this exercise is successfully completed, the process can then be repeated for other applications, business units or job flows.

After initial review and fine tuning of converted objects, it is possible to deploy job definitions and process flows with ORSYP for simulation and unit testing. This enables sequencing and scheduling of jobs to be confirmed prior to submitting workload for rigorous acceptance testing in a QA environment. Once validation is complete, the new objects are ready to go live, with existing legacy scheduling procedures being disabled at the same time.

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Staging areas manage roll-out from test to production environments

This phase of the process is usually handled by ORSYP and client teams working together. Quite often there will be a knowledge transfer exercise with ORSYP staff sharing best practice on how to structure test plans and creating template examples with client staff become increasingly independent as skills develop.

7. Production Support

To provide completely assurance on the success of each upgrade ORSYP consultants can remain on-site during the first few cycles. This can be advantageous supporting IT Operations through the transition period as staff gets familiar with the new tools. Of course, this helps drastically reduce any perceived risk when transitioning to a new automation platform.

Summary

Never has the pressure been so great on IT departments to do more with less. This means extracting costs wherever possible. It also means getting the most out of current IT assets without impacting service.

With ORSYP there is now a smart alternative for enterprise scheduling. Companies do not have to surrender to the pressure to migrate to a replacement scheduler that comes at a major price premium and leaves them at the mercy of an inflexible vendor.

Consolidating to an OSYP solution enables organizations to reduce costs, both in terms of software license fees as well as operational overheads. It can also enhance quality of service by optimizing IT processing to ensure end-users get the information they need to do their jobs, consistently at the right time. Automation of IT processes is set to fulfil an integral role as organizations explore cloud, hybrid computing and other IT service delivery models.

Establishing a unified enterprise automation solution at the heart of an IT operations environment will yield immediate returns by reducing costs and enabling efficiencies. Longer term it can become the foundation on which major innovation within and beyond the data center is built.

About ORSYP

ORSYP is an IT Operations Management specialist that develops and markets innovative solutions that automate IT processes and optimize resource utilization. ORSYP's proven software – including enterprise job scheduling, workload automation, performance monitoring and capacity management – and its ITSM consulting services give organizations enterprise-wide visibility and proactive control of their IT operations. Headquartered in Boston, Hong Kong, and Paris, ORSYP has been chosen by over 1400 customers as their trusted partner for software, consulting and education since 1986.

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